



PATENT APPLICATION  
Mo-4188  
LeA 29,111

07/46 IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

JUN 30 1997

## APPLICATION OF

ROLF WIEDEMANN ET AL.

SERIAL NUMBER: 08/362,547

FILED: JANUARY 3, 1995

**TITLE: A PROCESS FOR THE PRODUCTION OF RIGID FOAMS CONTAINING URETHANE GROUPS AND PREDOMINANTLY ISOCYANURATE GROUPS**

22

**SUPPLEMENTAL REPLY BRIEF**

## Assistant Commissioner for Patents

Washington, D.C. 20231

Sir:

This Supplemental Reply Brief is submitted to rebut certain arguments raised by the Examiner for the first time in the Supplemental Examiner's Answer dated May 30, 1997.

The Examiner stated for the first time in this Supplemental Answer at page 1, paragraph 1, lines 9-13 that "[F]irst, no comparison is made at the upper range of appellants' index values. Second, no comparison is made with the teachings of the cited Volkert patent. And, third, only one point within appellants' claimed NCO index is compared with one point outside of their NCO index value range."

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Assistant Commissioner for Patents, Washington, D.C. 20231, on 6/26/97

N. Denise Brown Reg. No. 36,097

Name of applicant, assignee or

Registered Representative

Signature

Signature  
Line 2

Appellants respectfully submit that there is no legal basis for requiring a showing "at the upper range of appellants' index values". The Examiner has not cited any art which contains working examples at or above the upper limit (i.e. 600) of the presently claimed range of NCO indices. All of the examples of the Volkert reference are at an NCO index of about 110. This is substantially **below** the lower limit (i.e. 200) of the presently claimed range of NCO indices, and **below** the NCO index of 142 which was used in Example 5 of Table 2!

The Examiner's insistence that Appellants make a showing above the presently claimed upper limit clearly requires Appellants to create new prior art. Appellants are not aware of any legal basis for such a position. (See *In re Geiger*, 2 USPQ2d 1276, 1279 (Fed. Cir. 1987) and Appellants comments in their Reply Brief filed March 5, 1997). If the Examiner continues to insist that Appellants create new prior art, which is clearly contrary to the holding in *In re Geiger*, legal support for this position should be provided.

With respect to the second point raised by the Examiner, why should Appellants provide a comparison with the Volkert reference when Example 5 in Table 2 (page 12) of the present application is **closer** to the presently claimed invention than the art? As set forth above and in their Reply Brief (see from page 3, starting at the fourth paragraph through the end of the first sentence on page 4), Example 5 uses essentially an identical formulation to Example 3. The NCO index was 142 for Example 5, and is clearly outside the scope of the present claims. This NCO index is, however, **closer** to the presently required range than the examples of the Volkert reference. Accordingly, Appellants respectfully submit that such a showing is not necessary and, in fact, is **irrelevant**.

The third point raised by the Examiner is not entirely correct. There are four examples (1-4) in Table 2 which are within the scope of the presently claimed invention with respect to formulation and NCO indices (see P12). All of these may be compared to Example 5 in Table 2, which is outside the scope of the present claims. The present application also contains three (3) comparison examples (see Examples 1-2 in Table 1 on P11, and Example 5 in Table 2 on P12). While Example 5 of Table 2 is the only comparison example with respect to the NCO

index, Examples 1 and 2 of Table 1 are comparison examples of formulations which do not provide dimensionally stable foams even though the NCO indices are within the presently required range.

Furthermore, Appellants are not aware of any legal requirement that a patent application contain a certain minimum number of comparison examples. It is respectfully submitted that the number of examples, both representative of the invention and comparative, is irrelevant. Rather, the proper issue is the content of these examples. Appellants respectfully submit that the examples of the present application clearly support the present claims.

It was also stated by the Examiner for the first time in the Supplemental Answer in the paragraph bridging pages 1-2, lines 4-6 that "... when a reference provides motivation to make a given change, the burden is shifted to applicant to demonstrate that any unobvious and unexpected results are not merely secondary in nature" (emphasis added). The Examiner further stated for the first time (same pages and paragraph, lines 7-8) with regard to this issue that "...appellants set forth a subjectively determined shrinkage observation as the critical feature of unexpectedness...". Appellants respectfully disagree.

The shrinkage observations set forth in the working examples of the present application are neither "secondary in nature" or "subjective". Shrinkage of a foam clearly effects the dimensional stability of a foam. If a foam is not dimensionally stable, it collapses! Appellants respectfully submit that shrinkage is not "merely secondary in nature" as suggested by the Examiner. This property inherently effects the ability of a particular formulation to be used to form a rigid foam. It is clearly improper for the Examiner to consider this as being "merely secondary in nature" since it inherently effects the dimensional stability of the foam.

The two comparison examples in Table 1 on page 11 clearly exhibit shrinkage. The present specification also expressly states that these foams are not dimensionally stable (see page 11, lines 25-26)! In Table 2 on page 12, Examples 1-4 which use blowing agents, polyols and NCO indices all of which are within the scope required by the present claims result in foams which exhibit no shrinkage and are dimensionally stable (see page 13, lines 1-6). Example 5 of table 2,

however, uses a very similar formulation to Example 3 with the main difference being the NCO index (which is outside the scope required by the present claims) exhibits shrinkage and is **not dimensionally stable!**

Appellants respectfully submit that it is "obvious" to one of ordinary skill in the art that shrinkage of a foam is **not** "secondary in nature"! This property clearly effects the ability of a foam to remain stable instead of collapsing. It is evident that the other properties of a foam are **irrelevant** if the foam is **not dimensionally stable!**

For these reasons and those discussed at length in their Appeal Brief and Reply Brief, Appellants maintain their position that the Examiner's rejections are improper. Appellants respectfully request that these rejections be reversed and that Claims 3-9 be allowed.

Respectfully submitted,

ROLF WIEDERMANN  
STEPHAN WENDEL  
WOLFGANG SCHMITZ

By   
N. Denise Brown  
Agent for Appellants  
Reg. No. 36,097

Bayer Corporation  
100 Bayer Road  
Pittsburgh, Pennsylvania 15205-9741  
(412) 777-2390  
FACSIMILE PHONE NUMBER:  
(412) 777-5449  
s:\kgb\db1485.srb